

0045338

January 4, 1991

Ms. Joan Kessner
Westinghouse Hanford Company
Office of Sample Management
2355 Stevens Drive
Richland, Washington 99352



Dear Ms Kessner:

Additional Analytical Results Package on Projects 90-027, Tank Samples

Attached are the additional analytical results on sample from Project 90-027, Diesel Tank Samples received into the Analytical Chemistry Department (ACD) Laboratories on August 11, 1990. The samples from this project have been reported to OSM prior however, additional ICP metals and PCB analyses were requested. These samples were an oils or organic based matrix and were treated as Special Analytical Services (SAS) samples. SAS implies that there are no national approved sample preparation and analysis procedures for these samples and the laboratory will employ the best available technology to acquire the best quality results. In accordance with agreements between the OSM and K-25 ACD, the protocol shown in Table 1 was utilized in performing these analyses. The sample identification for this project is shown in Table 2. Also attached are the previously reported results from all samples for this project.

The results are reported on ACD's ANALIS report format, per letter dated November 8, 1990. All data quality objectives were satisfied on the project.

ICP (TCLP) Metals

The samples in this project were oils or organic based material, thereby not being applicable to any nationally approved procedures. The samples analyzed for ICP metals, were prepared using Parr Bomb digestion technique. All of the required quality control criteria was applied to samples in the SDG. For this analysis all instrument calibrations (SPCC and CCC) were within acceptance criteria. All internal matrix spike percent recoveries were within acceptance limits. Interference check samples results were within acceptable limits. Replicate analyses were conducted on samples in the SDG and all relative percent deviations were within acceptance limits. All internal controls and check standards run during these analyses were well within the acceptance limits. At present the ACD cannot report the ICP metals blank results through the ANALIS database.

i 5/30/96 M.H.

Mercury

The samples were prepared for mercury analysis by Parr Bomb technique and analyzed by EPA-7470. All quality criteria were within acceptance limits.

Semi-Volatiles (BNAs)

This set of samples are oils and as such are not covered by CLP protocol. In order to analyze these samples, they were diluted by a large factor (i.e. 1000). The dilution was followed by direct injection. Therefore, there was no surrogate recoveries nor matrix spikes or method blanks since no extraction or sample concentration was performed. The CRQL limits are not applicable since no extraction was performed. Non-detected target compounds are marked with "NA" for the quantitation amount in the report, however, detection limits under the analytical conditions approach several million ug/Kg.

Hits are calculated from the continuing calibration response factors and multiplied by the dilution factor and finally reported as the resultant product in the report.

All DFTPP tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample for water matrices. All internal standard areas met water matrix acceptance criteria.

Volatiles (VOAs)

This set of samples are oils and as such are not covered by CLP protocol. In order to analyze these samples, they were diluted by a large factor (i.e. 1000). The dilution was followed by direct injection. Therefore, there was no surrogate recoveries nor matrix spikes or method blanks. A water blank was run with these samples. Non-detected target compounds are marked with "the detection limits" for the quantitation amount in the report, however, detection limits under the analytical conditions approach several million ug/Kg.

All BFB tune criteria were within acceptance criteria. All CCC and SPCC components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria for a water matrix.

Wet Chemistry (Flash Point)

All instrument calibrations were within acceptance criteria. All internal controls were within criteria.

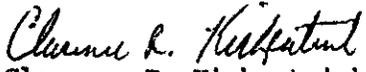
PCB

All BFB tune criteria were within acceptance criteria. All CCC and SPCC components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria for a water matrix.

Analytical Results Package on Projects 90-027, STA-0019-90 - Continued

I certify that this data package is in compliance with the terms and conditions of the OSM's revised Statement of Work and letter dated November 10, 1990, both technically and for completeness, for other than conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sincerely,


Clarence R. Kirkpatrick
Program Manager
Waste Management Analysis



Roy W. Morrow
Department Manager
Analytical Chemistry Department (K-25)

Table 1. Analytical Protocol used for Project 90-027

<u>Analysis</u>	<u>Protocol</u>
A. Semi-Volatiles	BNA (CLP) protocol
B. Volatiles	VOA (CLP) protocol
C. TCLP Metals	ASTM-D-3761/EPA-6010
D. Mercury	ASTM-D-3761/EPA-7470
E. PCB	EPA-608
<i>FS</i> . Flash Point	EPA-1010

Table 2. Sample Identification in Project 90-027

OSM Sample ID	Lab Sample ID	Lab File ID	Matrix	Comments
3000-0802-1	900816-013	NA	Oil	Sample
3000-0802-3	900816-016	NA	Oil	Sample
3000-0802-4	900816-017	NA	Oil	Sample
325-0802-1	900816-018	NA	Oil	Sample & ICP & PCB
182N-0807-1	900816-019	NA	Oil	Sample
SS27-0806-1	900816-022	NA	Oil	Sample
N-LFT-0807-1	900816-023	NA	Oil	Sample
KWIA-0807-1	900816-024	NA	Oil	Sample & ICP & PCB
KWIB-0807-1	900816-025	NA	Oil	Sample & ICP & PCB
L39-0807-1	900816-026	NA	Oil	Sample & ICP & PCB
6652-P-0807-1	900816-027	NA	Oil	Sample & ICP & PCB

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

ANALIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD □ : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Barium (Parr Bomb)	0.18	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Chromium (Parr Bomb)	39	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113-C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

ANALIS ID: 900816-018
 Laboratory: Gas / Liquid Chromatography Laboratory
 File ID:
 Instrument ID:
 Authorized By: D. S. ZINGG

Customer Sample ID: 325-0802-1
 Customer: J. KESSNER/R. SHUCK
 Sample Matrix: OIL
 Requisition Number:
 Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
 Preparation Procedure Number:
 Percent Moisture:
 Percent Moisture (decanted):
 Associated Blank:
 : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
 Analysis Procedure Number: EPA-608
 Dilution Factor: 1.0
 Analyst: LC FELLERS
 QA File Number: GC 0302

CAS	ug/g	CAS	ug/g
12674-11-2	Aroclor-1016	5U	
11104-28-2	Aroclor-1221	5U	
11141-16-5	Aroclor-1232	5U	
53469-21-9	Aroclor-1242	5U	
12672-29-6	Aroclor-1248	5U	
11097-69-1	Aroclor-1254	5U	
11096-82-5	Aroclor-1260	5U	

Data Reporting Qualifiers:

- U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
- B - Analyte was found in the reagent blank as well as the sample.
- J - Indicates an estimated value.
- ND - Not detected.
- A - Aldol condensation product.
- D - Secondary dilution.
- E - Exceeds initial calibration range.

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD ☐ : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 29-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 29-OCT-1990

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Chromium (Parr Bomb)	51	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

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AnaLIS ID: 900816-024
 Laboratory: Gas / Liquid Chromatography Laboratory
 File ID:
 Instrument ID:
 Authorized By: D. S. ZINGG

Customer Sample ID: KWIA-0807-1
 Customer: J. KESSNER/R. SHUCK
 Sample Matrix: OIL
 Requisition Number:
 Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
 Preparation Procedure Number:
 Percent Moisture:
 Percent Moisture (decanted):
 Associated Blank:
 [] : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
 Analysis Procedure Number: EPA-608
 Dilution Factor: 1.0
 Analyst: LC FELLERS
 QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

- U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
- B - Analyte was found in the reagent blank as well as the sample.
- J - Indicates an estimated value.
- ND - Not detected.
- A - Aldol condensation product.
- D - Secondary dilution.
- E - Exceeds initial calibration range.

Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-025 Project: G132 027 Customer Sample ID: KW18-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 12-DEC-1990
Material Description: TANK SAMPLES FROM HANFORD ☐ : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Chromium (Parr Bomb)	160	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Silver (Parr Bomb)	2.4	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

AnalIS ID: 900816-025
Laboratory: Gas / Liquid Chromatography Laboratory
File ID:
Instrument ID:
Authorized By: D. S. ZINGG

Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK
Sample Matrix: OIL
Requisition Number:
Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
Preparation Procedure Number:
Percent Moisture:
Percent Moisture (decanted):
Associated Blank:
 : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
Analysis Procedure Number: EPA-608
Dilution Factor: 1.0
Analyst: LC FELLERS
QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

- U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
- B - Analyte was found in the reagent blank as well as the sample.
- J - Indicates an estimated value.
- ND - Not detected.
- A - Aldol condensation product.
- D - Secondary dilution.
- E - Exceeds initial calibration range.

Oak Ridge K-25 Site
 Analytical Chemistry Department
 Results of Analyses

AnalIS ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
 Customer: J. KESSNER/R. SHUCK Requisition Number:
 Date Sampled: Date Sample Received: 11-AUG-1990
 Sampled By: Date Sample Completed: 12-DEC-1990
 Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Chromium (Parr Bomb)	31	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Silver (Parr Bomb)	0.73	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
 Date Approved: 13-DEC-1990

ANALYSIS DATA REPORT

Page 1 of 1

AnalIS ID: 900816-026
 Laboratory: Gas / Liquid Chromatography Laboratory
 File ID:
 Instrument ID:
 Authorized By: D. S. ZINGG

Customer Sample ID: L39-0807-1
 Customer: J. KESSNER/R. SHUCK
 Sample Matrix: OIL
 Requisition Number:
 Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
 Preparation Procedure Number:
 Percent Moisture:
 Percent Moisture (decanted):
 Associated Blank:
 : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
 Analysis Procedure Number: EPA-608
 Dilution Factor: 1.0
 Analyst: LC FELLERS
 QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

- U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
- B - Analyte was found in the reagent blank as well as the sample.
- J - Indicates an estimated value.
- ND - Not detected.
- A - Aldol condensation product.
- D - Secondary dilution.
- E - Exceeds initial calibration range.

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Oak Ridge K-25 Site
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
 Customer: J. KESSNER/R. SHUCK Requisition Number:
 Date Sampled: Date Sample Received: 11-AUG-1990
 Sampled By: Date Sample Completed: 12-DEC-1990
 Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
090402	TP-0801	Arsenic (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Barium (Parr Bomb)	<0.10	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Cadmium (Parr Bomb)	<0.30	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Chromium (Parr Bomb)	<1.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Lead (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Selenium (Parr Bomb)	<5.0	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
	TP-0801	Silver (Parr Bomb)	<0.60	ug/g	DR WILSON	01108A	8-NOV-1990
	TP-0908						
103202	ASTM-D3684 EPA-7470	Mercury (Parr Bomb)	<0.5	ug/g	LK BARKLEY	01113C	7-DEC-1990
183402	ASTM-E926-88	Parr Bomb Metals	C		BK PENNINGTON	90-243	5-NOV-1990
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
190902	ASTM-D3684	Parr Bomb Mercury	C		BK PENNINGTON	90-242	5-NOV-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Spike Recovery Data

Analysis	Amount Spiked	Amount Recovered	Percent Recovered
MERCURY (PARR BOMB)	2.00	2.05	102.50

Program Manager: C. R. Kirkpatrick
Date Approved: 13-DEC-1990

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ANALIS ID: 900816-027
 Laboratory: Gas / Liquid Chromatography Laboratory
 File ID:
 Instrument ID:
 Authorized By: D. S. ZINGG

Customer Sample ID: 6652-P-0807-1
 Customer: J. KESSNER/R. SHUCK
 Sample Matrix: OIL
 Requisition Number:
 Date Sample Received: 16-AUG-1990

PCB (TCL) OIL

Date Extracted/Prepared: 8-NOV-1990
 Preparation Procedure Number:
 Percent Moisture:
 Percent Moisture (decanted):
 Associated Blank:
 : Result has been Corrected for Spike

Date Analyzed: 8-NOV-1990
 Analysis Procedure Number: EPA-608
 Dilution Factor: 1.0
 Analyst: LC FELLERS
 QA File Number: GC 0302

CAS		ug/g	CAS		ug/g
12674-11-2	Aroclor-1016	5U			
11104-28-2	Aroclor-1221	5U			
11141-16-5	Aroclor-1232	5U			
53469-21-9	Aroclor-1242	5U			
12672-29-6	Aroclor-1248	5U			
11097-69-1	Aroclor-1254	5U			
11096-82-5	Aroclor-1260	5U			

Data Reporting Qualifiers:

- U - Compound was analyzed for but not detected. The number is the attainable detection limit for the sample.
- B - Analyte was found in the reagent blank as well as the sample.
- J - Indicates an estimated value.
- ND - Not detected.
- A - Aldol condensation product.
- D - Secondary dilution.
- E - Exceeds initial calibration range.

ANALYTICAL CHEMISTRY DEPARTMENT

Results of Analyses Reports

Project# - G132-027

(Flash Point, Volatiles, Semivolatiles Data)

ANALIS ID	CUSTOMER SAMPLE ID
900816-013	3000-0802-1
900816-016	3000-0802-3
900816-017	3000-0802-4
900816-018	325-0802-1
900816-019	182N-3-0807-1
900816-022	SS27-0806-1
900816-023	N-LFT-0807-1 ✓
900816-024	KWIA-0807-1 ✓
900816-025	KWIB-0807-1 ✓
900816-026	L39-0807-1
900816-027	6652-P-0807-1

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalYS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

ANALIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 25-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 25-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

ANALIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-025 Project: G132 027 Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

ANALIS ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed: 24-OCT-1990
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved: 24-OCT-1990

ANALYTICAL CHEMISTRY DEPARTMENT

Results of Analyses Reports

Project# - G132-027

ANALIS ID	CUSTOMER SAMPLE ID
900816-013	3000-0802-1
900816-016	3000-0802-3
900816-017	3000-0802-4
900816-018	325-0802-1
900816-019	182N-3-0807-1
900816-022	SS27-0806-1
900816-023	N-LFT-0807-1
900816-024	KWIA-0807-1
900816-025	KWIB-0807-1
900816-026	L39-0807-1
900816-027	6652-P-0807-1
900819-019	VBLK01
900820-023	VBLK02
900822-115	3000-0802-1MS
900822-116	3000-0802-1MSD

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-013 Project: G132 027 Customer Sample ID: 3000-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	75	degrees F	J GOODMAN JR	90-28	13-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

ANALIS ID: 900816-016 Project: G132 027 Customer Sample ID: 3000-0802-3
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	116	degrees F	J GOODMAN JR	90-29	20-SEP-1990
205109	TP-2051	Archive	REFRIG3	K10004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-017 Project: G132 027 Customer Sample ID: 3000-0802-4
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	-----	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	109	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-018 Project: G132 027 Customer Sample ID: 325-0802-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnaLIS ID: 900816-019 Project: G132 027 Customer Sample ID: 182N-3-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-022 Project: G132 027 Customer Sample ID: SS27-0806-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	77	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-023 Project: G132 027 Customer Sample ID: N-LFT-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	>145	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

AnalIS ID: 900816-024 Project: G132 027 Customer Sample ID: KWIA-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	82	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

Analys ID: 900816-025 Project: G132 027 Customer Sample ID: KWIB-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	81	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

Analys ID: 900816-026 Project: G132 027 Customer Sample ID: L39-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	-----	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	16-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

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Oak Ridge K-25 Plant
Analytical Chemistry Department
Results of Analyses

Analys ID: 900816-027 Project: G132 027 Customer Sample ID: 6652-P-0807-1
Customer: J. KESSNER/R. SHUCK Requisition Number:
Date Sampled: Date Sample Received: 11-AUG-1990
Sampled By: Date Sample Completed:
Material Description: TANK SAMPLES FROM HANFORD [] : Result has been Corrected for Spike

Activ. Number	Procedure No.	Analysis	Result	Units	Analyst	QA File Number	Date Completed
		BNA (OIL)	_____	ug/Kg			
186802	EPA-1010	Flash Point Closed Cup	85	degrees F	J GOODMAN JR	90-29	15-SEP-1990
205109	TP-2051	Archive	REFRIG3	K1004A	CL MONROE	205109	17-AUG-1990

Program Manager: C. R. Kirkpatrick
Date Approved:

CASE NARRATIVE
for BNA GC/MS data

1

Laboratory Name: MARTIN MARIETTA
Case # : G132-027
SDG # : KWIA-0807-1
Contract # : 0288

Sample Identification in SDG batch KWIA-0807-1:

<u>EPA SAMPLE ID</u>	<u>LAB SAMPLE ID</u>	<u>LAB FILE ID</u>	<u>MATRIX</u>	<u>COMMENT</u>
Semivolatle oil samples (SDG # KWIA-0807-1)				
3000-0802-1	900816-013	>14123	oil	
3000-0802-4	900816-017	>14125	oil	
SS27-0806-1	900816-022	>14128	oil	
3000-0802-3	900816-016	>14124	oil	
325-0802-1	900816-018	>14126	oil	
182N-3-0807-1	900816-019	>14127	oil	
6652-P-0807-1	900816-027	>14133	oil	
N-LFT-0807-1	900816-023	>14129	oil	
KWIA-0807-1	900816-024	>14130	oil	
KWIB-0807-1	900816-025	>14131	oil	
L39-0807-1	900816-026	>14132	oil	

SEMIVOLATILE OIL SDG # KWIA-0807-1:

NOTE: THIS SET OF SAMPLES ARE OILS AND AS SUCH ARE NOT COVERED BY CLP PROTOCOL! CLP FORMS WILL BE REPORTED WHERE APPLICABLE. IN ORDER TO ANALYZE THESE SAMPLES, THEY WERE DILUTED BY A LARGE FACTOR (I.E., 667). THE DILUTION WAS FOLLOWED BY DIRECT INJECTION. THEREFORE, THERE WAS NO SURROGATE RECOVERIES NOR MATRIX SPIKES NOR METHOD BLANKS SINCE NO EXTR

ACTION OR SAMPLE CONCENTRATION WAS PERFORMED. THE CRQL LIMITS ARE NOT APPLICABLE SINCE NO EXTRACTION WAS PERFORMED. THEREFORE NON-DETECTED TARGET COMPOUNDS ARE MARKED WITH "NA" FOR THE QUANTITATION AMOUNT ON FORM 1. HOWEVER, DETECTION LIMITS UNDER THE ABOVE CONDITIONS APPROACH SEVERAL MILLION ug/L (WELL ABOVE ANY REGULATED LEVELS OF ANY TARGET COMPOUNDS).

HITS ARE CALCULATED FROM THE CONTINUING CALIBRATION RESPONSE FACTORS AND MULTIPLIED BY THE DILUTION FACTOR AND FINALLY REPORTED AS THE RESULTANT PRODUCT ON FORM 1.

FOR THIS SEMIVOLATILE OIL DATA PACKAGE THERE WILL BE NO FORM 2, FORM 3, OR FORM 4 BECAUSE THESE FORMS ARE JUST NOT APPLICABLE.

All BFB tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample for water matrixes. Most internal standard areas fall outside water matrix acceptance criteria.

I certify that this data package is in compliance with the terms and conditions of the USEPA 2/88 CLP contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

SIGNATURE David C. Canada
David C. Canada, Ph.D.
Supervisor, Organic GC/MS

DATE 10/29/90
October 29, 1990

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIA-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) WATER oil ^{SAS} 10/29/90

Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14130

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIA-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) WATER oil / ^{SAS} 10/29/90

Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14130

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
KWIA-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) WATER oil ^{SAS} 10/29/90

Lab Sample ID: 900816-024

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14130

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	11.92	7.8E+3	J
02.	Unknown alkyl hydrocarbon	13.97	9.3E+3	J
03.	Unknown alkyl hydrocarbon	14.25	4.8E+3	J
04.	Unknown alkyl hydrocarbon	15.37	5.8E+3	J
05.	Unknown	15.62	5.4E+3	J
06.	Unknown alkyl hydrocarbon	15.87	1.1E+4	J
07.	Unknown alkyl hydrocarbon	17.25	8.3E+3	J
08.	Unknown alkyl hydrocarbon	17.65	2.2E+4	J
09.	Unknown alkyl hydrocarbon	18.68	1.1E+4	J
10.	Unknown alkyl hydrocarbon	19.28	2.2E+4	J
11.	Unknown alkyl hydrocarbon	20.84	2.5E+4	J
12.	Unknown alkyl hydrocarbon	21.58	1.6E+4	J
13.	Unknown alkyl hydrocarbon	22.33	3.2E+4	J
14.	Unknown alkyl hydrocarbon	22.40	2.4E+4	J
15.	Unknown alkyl hydrocarbon	23.72	2.4E+4	J
16.	Unknown alkyl hydrocarbon	23.86	1.9E+4	J
17.	Unknown alkyl hydrocarbon	25.05	2.0E+4	J
18.	Unknown alkyl hydrocarbon	26.33	1.4E+4	J
19.	Unknown alkyl hydrocarbon	27.53	9.9E+3	J
20.	Unknown alkyl hydrocarbon	28.69	7.9E+3	J
21.				
22.				
23.				
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27.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIB-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SUB 10/90} WATER oil

Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14131

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
108-95-2	Phenol	NA		IU D
111-44-4	bis(2-Chloroethyl)Ether	NA		IU D
95-57-8	2-Chlorophenol	NA		IU D
541-73-1	1,3-Dichlorobenzene	NA		IU D
106-46-7	1,4-Dichlorobenzene	NA		IU D
100-51-6	Benzyl alcohol	NA		IU D
95-50-1	1,2-Dichlorobenzene	NA		IU D
95-48-7	2-Methylphenol (o-cresol)	NA		IU D
108-60-1	bis(2-chloroisopropyl)ether	NA		IU D
106-44-5	4-Methylphenol (p-cresol)	NA		IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA		IU D
67-72-1	Hexachloroethane	NA		IU D
98-95-3	Nitrobenzene	NA		IU D
78-59-1	Isophorone	NA		IU D
88-75-5	2-Nitrophenol	NA		IU D
105-67-9	2,4-Dimethylphenol	NA		IU D
65-85-0	benzoic acid	NA		IU D
111-91-1	bis(2-Chloroethoxy)methane	NA		IU D
120-83-2	2,4-Dichlorophenol	NA		IU D
120-82-1	1,2,4-Trichlorobenzene	NA		IU D
91-20-3	Naphthalene	NA		IU D
106-47-8	4-Chloroaniline	NA		IU D
87-68-3	Hexachlorobutadiene	NA		IU D
59-50-7	4-Chloro-3-methylphenol	NA		IU D
91-57-6	2-Methylnaphthalene	NA		IU D
77-47-4	Hexachlorocyclopentadiene	NA		IU D
88-06-2	2,4,6-Trichlorophenol	NA		IU D
95-95-4	2,4,5-Trichlorophenol	NA		IU D
91-58-7	2-Chloronaphthalene	NA		IU D
88-74-4	2-Nitroaniline	NA		IU D
131-11-3	Dimethylphthalate	NA		IU D
208-96-8	Acenaphthylene	NA		IU D
606-20-2	2,6-Dinitrotoluene	NA		IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MARTIN MARIETTA

Contract: 0288

KWIB-0807-1

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{soil} WATER _{10/29/90} o.i.

Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14131

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

KWIB-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER _{10/29/90}

Lab Sample ID: 900816-025

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14131

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	10.17	4600.	J
02.	Unknown alkyl hydrocarbon	11.90	2.2E+4	J
03.	Unknown	12.30	5100.	J
04.	Unknown alkyl hydrocarbon	13.07	5600.	J
05.	Unknown alkyl hydrocarbon	13.24	5800.	J
06.	Unknown alkyl hydrocarbon	13.96	3.2E+4	J
07.	Unknown alkyl hydrocarbon	14.24	1.1E+4	J
08.	Unknown alkyl hydrocarbon	14.98	5400.	J
09.	Unknown alkyl hydrocarbon	15.19	4800.	J
10.	Unknown alkyl hydrocarbon	15.36	1.4E+4	J
11.	Unknown	15.63	5000.	J
12.	Unknown alkyl hydrocarbon	15.86	2.8E+4	J
13.	Unknown alkyl hydrocarbon	17.01	5700.	J
14.	Unknown alkyl hydrocarbon	17.25	1.2E+4	J
15.	Unknown alkyl hydrocarbon	17.64	2.7E+4	J
16.	Unknown alkyl hydrocarbon	18.67	1.2E+4	J
17.	Unknown alkyl hydrocarbon	19.28	2.0E+4	J
18.	Unknown alkyl hydrocarbon	20.85	1.1E+4	J
19.	Unknown alkyl hydrocarbon	21.58	9.0E+3	J
20.	Unknown alkyl hydrocarbon	22.32	8.0E+3	J
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22.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ~~WATER~~ OIL

Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14132

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-4	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{XCS} WATER oil

Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14132

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER oil
10/29/90

Lab Sample ID: 900816-026

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14132

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	11.92	8.6E+3	J
02.	Unknown alkyl hydrocarbon	13.96	1.3E+4	J
03.	Unknown alkyl hydrocarbon	14.24	3.9E+3	J
04.	Unknown	15.36	4.9E+3	J
05.	Unknown PAH	15.62	4.5E+3	J
06.	Unknown alkyl hydrocarbon	15.86	1.3E+4	J
07.	Unknown	16.77	3.3E+3	J
08.	Unknown alkyl hydrocarbon	17.65	1.6E+4	J
09.	Unknown alkyl hydrocarbon	18.67	6.1E+3	J
10.	Unknown alkyl hydrocarbon	19.28	1.5E+4	J
11.	Unknown	20.05	4.9E+3	J
12.	Unknown alkyl hydrocarbon	20.84	1.5E+4	J
13.	Unknown alkyl hydrocarbon	21.58	6.9E+3	J
14.	Unknown alkyl hydrocarbon	22.33	2.7E+4	J
15.	Unknown alkyl hydrocarbon	22.42	1.0E+4	J
16.	Unknown alkyl hydrocarbon	23.72	1.8E+4	J
17.	Unknown alkyl hydrocarbon	23.86	6.9E+3	J
18.	Unknown alkyl hydrocarbon	25.05	1.5E+4	J
19.	Unknown alkyl hydrocarbon	26.33	1.1E+4	J
20.	Unknown alkyl hydrocarbon	27.55	1.0E+4	J
21.				
22.				
23.				
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25.				
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27.				
28.				
29.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IN-LFT-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER oil

Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14129

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IN-LFT-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{3/1} ~~WATER~~ oil

Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14129

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

N-LFT-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{3/25} ~~WATER~~ ^{10/29/90} oil

Lab Sample ID: 900816-023

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14129

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	7.02	4800.	J
02.	Unknown alkyl hydrocarbon	11.92	1.3E+4	J
03.	Unknown alkyl hydrocarbon	13.96	1.5E+4	J
04.	Unknown alkyl hydrocarbon	15.36	5300.	J
05.	Unknown PAH	15.61	3700.	J
06.	Unknown alkyl hydrocarbon	15.86	1.6E+4	J
07.	Unknown alkyl hydrocarbon	17.24	4500.	J
08.	Unknown alkyl hydrocarbon	17.65	2.1E+4	J
09.	Unknown PAH	17.88	3800.	J
10.	Unknown alkyl hydrocarbon	18.68	7900.	J
11.	Unknown alkyl hydrocarbon	19.27	2.4E+4	J
12.	Unknown alkyl hydrocarbon	20.83	2.2E+4	J
13.	Unknown alkyl hydrocarbon	21.57	7800.	J
14.	Unknown alkyl hydrocarbon	22.32	2.1E+4	J
15.	Unknown alkyl hydrocarbon	22.41	1.4E+4	J
16.	Unknown alkyl hydrocarbon	23.71	1.6E+4	J
17.	Unknown alkyl hydrocarbon	23.85	5400.	J
18.	Unknown alkyl hydrocarbon	25.05	1.3E+4	J
19.	Unknown alkyl hydrocarbon	26.32	7900.	J
20.	Unknown alkyl hydrocarbon	27.52	5000.	J
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22.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SS27-0806-1

Lab Name: MARTIN MARIETTA Contract: 0288
Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: KWIA-0807-1
Matrix: (soil/water) ^{SN} WATER 0:1 ^{10/29/90} Lab Sample ID: 900816-022
Sample wt/vol: NA (g/mL) ML Lab File ID: >14128
Level: (low/med) LOW Date Received: 08/11/90
% Moisture: not dec. NA dec. NA Date Extracted: NA
Extraction: (Sepf/Cont/Sonc) NA Date Analyzed: 10/12/90
GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol_(o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol_(p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS27-0806-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER Oil

Lab Sample ID: 900816-022

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14128

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
SS27-0806-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER 0:1
10/29/90

Lab Sample ID: 900816-022

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14128

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl benzene	5.78	4900.	J
02.	Unknown alkyl benzene	6.01	2.7E+4	J
03.	Unknown alkyl benzene	6.66	18500.	J
04.	Unknown alkyl benzene	8.56	18800.	J
05.	Unknown alkyl hydrocarbon	8.65	3100.	J
06.	Unknown alkyl benzene	8.73	4100.	J
07.	Unknown alkyl benzene	9.34	1.1E+4	J
08.				
09.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

182N-3-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14127

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

182N-3-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/L} WATER ^{10/27/90} Oil

Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14127

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	I U D
83-32-9	Acenaphthene	NA	I U D
51-28-5	2,4-dinitrophenol	NA	I U D
100-02-7	4-nitrophenol	NA	I U D
132-64-9	Dibenzofuran	NA	I U D
121-14-2	2,4-Dinitrotoluene	NA	I U D
84-66-2	Diethylphthalate	NA	I U D
7005-72-3	4-chlorophenyl phenyl ether	NA	I U D
86-73-7	Fluorene	NA	I U D
100-01-6	4-Nitroaniline	NA	I U D
534-52-1	4,6-Dinitro-2-methylphenol	NA	I U D
86-30-6	N-Nitrosodiphenylamine (1)	NA	I U D
101-55-3	4-bromophenyl phenyl ether	NA	I U D
118-74-1	Hexachlorobenzene	NA	I U D
87-86-5	Pentachlorophenol	NA	I U D
85-01-8	Phenanthrene	NA	I U D
120-12-7	Anthracene	NA	I U D
84-74-2	Di-n-butylphthalate	NA	I U D
206-44-0	Fluoranthene	NA	I U D
129-00-0	Pyrene	NA	I U D
85-68-7	Butylbenzylphthalate	NA	I U D
91-94-1	3,3'-Dichlorobenzidine	NA	I U D
56-55-3	Benzo(a)anthracene	NA	I U D
218-01-9	Chrysene	NA	I U D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	I U D
117-84-0	Di-n-octylphthalate	NA	I U D
205-99-2	Benzo(b)fluoranthene	NA	I U D
207-08-9	Benzo(k)fluoranthene	NA	I U D
50-32-8	Benzo(a)pyrene	NA	I U D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	I U D
53-70-3	Dibenz(a,h)anthracene	NA	I U D
191-24-2	Benzo(g,h,i)perylene	NA	I U D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

182N-3-0807-11

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{5/3} ^{10/29/90} WATER Oil

Lab Sample ID: 900816-019

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14127

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	11.92	1.3E+4	J
02.	Unknown alkyl hydrocarbon	13.96	1.6E+4	J
03.	Unknown alkyl hydrocarbon	14.24	4000.	J
04.	Unknown alkyl hydrocarbon	15.36	4700.	J
05.	Unknown	15.62	4900.	J
06.	Unknown alkyl hydrocarbon	15.86	1.4E+4	J
07.	Unknown alkyl hydrocarbon	17.24	13700.	J
08.	Unknown alkyl hydrocarbon	17.64	1.9E+4	J
09.	Unknown alkyl hydrocarbon	18.45	13900.	J
10.	Unknown alkyl hydrocarbon	18.67	15800.	J
11.	Unknown alkyl hydrocarbon	19.27	1.9E+4	J
12.	Unknown alkyl hydrocarbon	20.83	1.7E+4	J
13.	Unknown alkyl hydrocarbon	21.57	18300.	J
14.	Unknown alkyl hydrocarbon	22.30	1.5E+4	J
15.	Unknown alkyl hydrocarbon	22.39	17000.	J
16.	Unknown alkyl hydrocarbon	23.72	1.3E+4	J
17.	Unknown alkyl hydrocarbon	23.85	14800.	J
18.	Unknown alkyl hydrocarbon	25.05	18900.	J
19.	Unknown alkyl hydrocarbon	26.32	17200.	J
20.	Unknown alkyl hydrocarbon	27.54	15700.	J
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22.				
23.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

325-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14126

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

325-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER 0:1
10/29/90

Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14126

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl_phenyl_ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

325-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{3/25} ~~WATER~~ ^{10/29/90} Oil

Lab Sample ID: 900816-018

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14126

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:

Number TICs found: 20

(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	11.92	1.1E+4	J
02.	Unknown alkyl hydrocarbon	13.96	1.4E+4	J
03.	Unknown alkyl hydrocarbon	14.24	5400.	J
04.	Unknown alkyl hydrocarbon	15.36	6500.	J
05.	Unknown PAH	15.62	7600.	J
06.	Unknown alkyl hydrocarbon	15.86	1.5E+4	J
07.	Unknown alkyl hydrocarbon	17.24	6300.	J
08.	Unknown alkyl hydrocarbon	17.64	2.3E+4	J
09.	Unknown alkyl hydrocarbon	18.67	9700.	J
10.	Unknown alkyl hydrocarbon	19.27	2.2E+4	J
11.	Unknown alkyl hydrocarbon	20.83	2.2E+4	J
12.	Unknown alkyl hydrocarbon	21.57	6700.	J
13.	Unknown alkyl hydrocarbon	22.32	1.9E+4	J
14.	Unknown alkyl hydrocarbon	22.41	9500.	J
15.	Unknown alkyl hydrocarbon	23.71	1.4E+4	J
16.	Unknown alkyl hydrocarbon	23.85	8400.	J
17.	Unknown alkyl hydrocarbon	25.04	1.3E+4	J
18.	Unknown alkyl hydrocarbon	26.32	9300.	J
19.	Unknown alkyl hydrocarbon	27.54	4500.	J
20.	Unknown alkyl hydrocarbon	28.70	4000.	J
21.				
22.				
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18
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{WAS} WATER Oil

Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14123

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	I U D
111-44-4	bis(2-Chloroethyl)Ether	NA	I U D
95-57-8	2-Chlorophenol	NA	I U D
541-73-1	1,3-Dichlorobenzene	NA	I U D
106-46-7	1,4-Dichlorobenzene	NA	I U D
100-51-6	Benzyl alcohol	NA	I U D
95-50-1	1,2-Dichlorobenzene	NA	I U D
95-48-7	2-Methylphenol (o-cresol)	NA	I U D
108-60-1	bis(2-chloroisopropyl)ether	NA	I U D
106-44-5	4-Methylphenol (p-cresol)	NA	I U D
621-64-7	N-Nitroso-Di-n-propylamine	NA	I U D
67-72-1	Hexachloroethane	NA	I U D
98-95-3	Nitrobenzene	NA	I U D
78-59-1	Isophorone	NA	I U D
88-75-5	2-Nitrophenol	NA	I U D
105-67-9	2,4-Dimethylphenol	NA	I U D
65-85-0	benzoic acid	NA	I U D
111-91-1	bis(2-Chloroethoxy)methane	NA	I U D
120-83-2	2,4-Dichlorophenol	NA	I U D
120-82-1	1,2,4-Trichlorobenzene	NA	I U D
91-20-3	Naphthalene	3.1E+3	I D
106-47-8	4-Chloroaniline	NA	I U D
87-68-3	Hexachlorobutadiene	NA	I U D
59-50-7	4-Chloro-3-methylphenol	NA	I U D
91-57-6	2-Methylnaphthalene	3.1E+3	I D
77-47-4	Hexachlorocyclopentadiene	NA	I U D
88-06-2	2,4,6-Trichlorophenol	NA	I U D
95-95-4	2,4,5-Trichlorophenol	NA	I U D
91-58-7	2-Chloronaphthalene	NA	I U D
88-74-4	2-Nitroaniline	NA	I U D
131-11-3	Dimethylphthalate	NA	I U D
208-96-8	Acenaphthylene	NA	I U D
606-20-2	2,6-Dinitrotoluene	NA	I U D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER Oil

Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14123

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3000-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/L} WATER 0:1
10/29/90

Lab Sample ID: 900816-013

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14123

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	4.29	4.7E+3	J
02.	Unknown alkyl benzene	5.91	1.5E+4	J
03.	Unknown alkyl benzene	6.14	6.1E+4	J
04.	Unknown alkyl benzene	6.75	2.1E+4	J
05.	Unknown alkyl benzene	8.38	4.7E+3	J
06.	Unknown alkyl benzene	8.60	2.6E+4	J
07.	Unknown alkyl benzene	8.76	9.9E+3	J
08.	Unknown alkyl benzene	9.03	5.2E+3	J
09.	Unknown alkyl benzene	9.37	2.7E+4	J
10.	Unknown alkyl benzene	10.01	6.4E+3	J
11.	Unknown alkyl benzene	10.75	5.3E+3	J
12.	Unknown alkyl benzene	11.34	6.1E+3	J
13.	Unknown alkyl benzene	11.49	4.7E+3	J
14.	Unknown alkyl hydrocarbon	13.95	4.5E+3	J
15.	Unknown alkyl hydrocarbon	15.85	5.2E+3	J
16.	Unknown alkyl hydrocarbon	17.61	9.1E+3	J
17.	Unknown alkyl hydrocarbon	19.25	8.2E+3	J
18.	Unknown alkyl hydrocarbon	20.81	8.5E+3	J
19.	126-73-8 Tributyl Phosphate	21.57	2.1E+4	J
20.	Unknown alkyl hydrocarbon	22.28	1.0E+4	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
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30.				

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-3

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET.

EPA SAMPLE NO.

3000-0802-3

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER _{10/29/90} Oil

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl_phenyl_ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl_phenyl_ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.:

3000-0802-3

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-016

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14124

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown	4.62	3300.	J
02.	Unknown	21.62	3800.	J
03.				
04.				
05.				
06.				
07.				
08.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} ~~WATER~~ Oil

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-017

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14125

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl benzene	5.75	1.0E+4	J
02.	Unknown alkyl benzene	5.99	5.7E+4	J
03.	Unknown alkyl benzene	6.64	2.3E+4	J
04.	Unknown alkyl benzene	8.54	3.3E+4	J
05.	Unknown alkyl benzene	8.70	1.6E+4	J
06.	Unknown alkyl benzene	8.96	7500.	J
07.	Unknown alkyl benzene	9.32	4.4E+4	J
08.	Unknown alkyl benzene	10.73	7800.	J
09.	Unknown alkyl benzene	10.82	6800.	J
10.	Unknown alkyl benzene	11.33	1.0E+4	J
11.	Unknown alkyl benzene	11.48	8700.	J
12.	Unknown alkyl hydrocarbon	11.90	6200.	J
13.	Unknown alkyl hydrocarbon	15.86	7600.	J
14.	Unknown alkyl hydrocarbon	17.64	1.1E+4	J
15.	Unknown alkyl hydrocarbon	19.27	1.2E+4	J
16.	Unknown alkyl hydrocarbon	20.83	9700.	J
17.	Unknown alkyl hydrocarbon	22.32	1.1E+4	J
18.	Unknown alkyl hydrocarbon	22.41	7000.	J
19.	Unknown alkyl hydrocarbon	23.71	9800.	J
20.	Unknown alkyl hydrocarbon	25.05	6400.	J
21.				
22.				
23.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6652-P-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{S/S} WATER ^{10/29/90} Oil

Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14133

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	NA	IU D
111-44-4	bis(2-Chloroethyl)Ether	NA	IU D
95-57-8	2-Chlorophenol	NA	IU D
541-73-1	1,3-Dichlorobenzene	NA	IU D
106-46-7	1,4-Dichlorobenzene	NA	IU D
100-51-6	Benzyl alcohol	NA	IU D
95-50-1	1,2-Dichlorobenzene	NA	IU D
95-48-7	2-Methylphenol (o-cresol)	NA	IU D
108-60-1	bis(2-chloroisopropyl)ether	NA	IU D
106-44-5	4-Methylphenol (p-cresol)	NA	IU D
621-64-7	N-Nitroso-Di-n-propylamine	NA	IU D
67-72-1	Hexachloroethane	NA	IU D
98-95-3	Nitrobenzene	NA	IU D
78-59-1	Isophorone	NA	IU D
88-75-5	2-Nitrophenol	NA	IU D
105-67-9	2,4-Dimethylphenol	NA	IU D
65-85-0	benzoic acid	NA	IU D
111-91-1	bis(2-Chloroethoxy)methane	NA	IU D
120-83-2	2,4-Dichlorophenol	NA	IU D
120-82-1	1,2,4-Trichlorobenzene	NA	IU D
91-20-3	Naphthalene	NA	IU D
106-47-8	4-Chloroaniline	NA	IU D
87-68-3	Hexachlorobutadiene	NA	IU D
59-50-7	4-Chloro-3-methylphenol	NA	IU D
91-57-6	2-Methylnaphthalene	NA	IU D
77-47-4	Hexachlorocyclopentadiene	NA	IU D
88-06-2	2,4,6-Trichlorophenol	NA	IU D
95-95-4	2,4,5-Trichlorophenol	NA	IU D
91-58-7	2-Chloronaphthalene	NA	IU D
88-74-4	2-Nitroaniline	NA	IU D
131-11-3	Dimethylphthalate	NA	IU D
208-96-8	Acenaphthylene	NA	IU D
606-20-2	2,6-Dinitrotoluene	NA	IU D

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6652-P-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{SAS} WATER Oil
10/29/90

Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14133

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	NA	IU D
83-32-9	Acenaphthene	NA	IU D
51-28-5	2,4-dinitrophenol	NA	IU D
100-02-7	4-nitrophenol	NA	IU D
132-64-9	Dibenzofuran	NA	IU D
121-14-2	2,4-Dinitrotoluene	NA	IU D
84-66-2	Diethylphthalate	NA	IU D
7005-72-3	4-chlorophenyl phenyl ether	NA	IU D
86-73-7	Fluorene	NA	IU D
100-01-6	4-Nitroaniline	NA	IU D
534-52-1	4,6-Dinitro-2-methylphenol	NA	IU D
86-30-6	N-Nitrosodiphenylamine (1)	NA	IU D
101-55-3	4-bromophenyl phenyl ether	NA	IU D
118-74-1	Hexachlorobenzene	NA	IU D
87-86-5	Pentachlorophenol	NA	IU D
85-01-8	Phenanthrene	NA	IU D
120-12-7	Anthracene	NA	IU D
84-74-2	Di-n-butylphthalate	NA	IU D
206-44-0	Fluoranthene	NA	IU D
129-00-0	Pyrene	NA	IU D
85-68-7	Butylbenzylphthalate	NA	IU D
91-94-1	3,3'-Dichlorobenzidine	NA	IU D
56-55-3	Benzo(a)anthracene	NA	IU D
218-01-9	Chrysene	NA	IU D
117-81-7	bis(2-Ethylhexyl)phthalate	NA	IU D
117-84-0	Di-n-octylphthalate	NA	IU D
205-99-2	Benzo(b)fluoranthene	NA	IU D
207-08-9	Benzo(k)fluoranthene	NA	IU D
50-32-8	Benzo(a)pyrene	NA	IU D
193-39-5	Indeno(1,2,3-cd)pyrene	NA	IU D
53-70-3	Dibenz(a,h)anthracene	NA	IU D
191-24-2	Benzo(g,h,i)perylene	NA	IU D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

6652-P-0807-11

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: KWIA-0807-1

Matrix: (soil/water) ^{5/11} ~~WATER~~ ^{10/29/90} Oil

Lab Sample ID: 900816-027

Sample wt/vol: NA (g/mL) ML

Lab File ID: >14133

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA dec. NA

Date Extracted: NA

Extraction: (Sepf/Cont/Sonc) NA

Date Analyzed: 10/12/90

GPC Cleanup: (Y/N) N pH: NA

Dilution Factor: 667

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01.	Unknown alkyl hydrocarbon	11.90	1.1E+4	J
02.	Unknown	13.05	3.0E+3	J
03.	Unknown alkyl hydrocarbon	13.96	1.1E+4	J
04.	Unknown alkyl hydrocarbon	14.24	4.9E+3	J
05.	Unknown alkyl hydrocarbon	15.36	5.5E+3	J
06.	Unknown alkyl hydrocarbon	15.86	9.6E+3	J
07.	Unknown alkyl hydrocarbon	17.02	3.2E+3	J
08.	Unknown alkyl hydrocarbon	17.24	6.3E+3	J
09.	Unknown alkyl hydrocarbon	17.65	1.5E+4	J
10.	Unknown	17.87	3.9E+3	J
11.	Unknown alkyl hydrocarbon	18.68	8.9E+3	J
12.	Unknown alkyl hydrocarbon	19.28	1.6E+4	J
13.	Unknown alkyl hydrocarbon	20.83	1.8E+4	J
14.	Unknown alkyl hydrocarbon	21.58	1.2E+4	J
15.	Unknown alkyl hydrocarbon	22.31	2.2E+4	J
16.	Unknown alkyl hydrocarbon	22.40	1.2E+4	J
17.	Unknown alkyl hydrocarbon	23.71	1.5E+4	J
18.	Unknown alkyl hydrocarbon	23.84	1.1E+4	J
19.	Unknown alkyl hydrocarbon	25.05	1.1E+4	J
20.	Unknown alkyl hydrocarbon	26.32	4.8E+3	J
21.				
22.				
23.				
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27.				
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CASE NARRATIVE
for VOA GC/MS data

Laboratory Name: MARTIN MARIETTA
Case # : G132-027
SDG # : 3000-0802-1
Contract # : 0288

Sample Identification in SDG batch 3000-0802-1:

<u>EPA SAMPLE ID</u>	<u>LAB SAMPLE ID</u>	<u>LAB FILE ID</u>	<u>MATRIX</u>	<u>COMMENT</u>
Volatile oil samples (SDG # 3000-0802-1)				
VBLK01	900819-019	>06534	water	method blank (8/19/90)
3000-0802-1	900816-013	>06535	oil	assoc. unspiked samp
3000-0802-1MS	900816-014	>06536	oil	matrix spiked sample
3000-0802-1MSD	900816-015	>06537	oil	matrix spiked dup.
3000-0802-4	900816-017	>06539	oil	
SS27-0806-1	900816-022	>06544	oil	
VBLK02	900820-023	>06552	water	method blank (8/20/90)
3000-0802-3	900816-016	>06554	oil	
325-0802-1	900816-018	>06555	oil	
182N-3-0807-1	900816-019	>06556	oil	
6652-P-0807-1	900816-027	>06561	oil	
N-LFT-0807-1	900816-023	>06557	oil	
KWIA-0807-1	900816-024	>06558	oil	
KWIB-0807-1	900816-025	>06559	oil	
L39-0807-1	900816-026	>06560	oil	

VOLATILE OIL SDG # 3000-0802-1:

NOTE: THIS SET OF SAMPLES ARE OILS AND AS SUCH ARE NOT COVERED BY CLP PROTOCOL! FORMS WILL BE REPORTED WHERE APPLICABLE. IN ORDER TO ANALYZE THESE SAMPLES, THEY WERE DILUTED BY A LARGE FACTOR. THE SAMPLES WERE THEN TREATED USING NORMAL CLP PROTOCOL.

NOTE: THE BNA MATRIX SPIKE AND MATRIX SPIKE DUPLICATE WERE USED INSTEAD OF THE VOA MATRIX SPIKE AND MATRIX SPIKE DUPLICATE IN THIS BATCH. THIS CAUSES NO PROBLEMS IN THE DATA QA AND IS ACCEPTABLE TO THE PROJECT MANAGER. THE LAB SAMPLE ID WAS CHANGED ON THE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE IN ORDER TO LOG THESE SAMPLES IN AS VOA MATRIX SPIKES AND MATRIX SPIKE DUPLICATES. THE DATA MAY NOT REFLECT THESE CHANGES, HOWEVER, THE FOLLOWING EQUIVALENCIES CAN BE USED WHERE QUESTIONS ARISE ON THE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE LAB SAMPLE ID'S.

900816-014 (ORIGINAL BNA MS ID) = 900822-115
900816-015 (ORIGINAL BNA MSD ID) = 900822-116

All surrogate standards were within percent recovery acceptance criteria. All matrix spike and matrix spike duplicate criteria were within acceptance limits. All BFB tune criteria were within acceptance criteria. All "CCC" and "SPCC" components met acceptance criteria for both the initial and continuing calibration check sample. All internal standard areas were within acceptance criteria. Although all criteria were within acceptance windows, it must be noted that this means nothing since the criteria were setup for a water matrix—not an oil matrix.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

SIGNATURE David C. Canada
David C. Canada, Ph.D
Supervisor, Organic GC/MS

DATE 10/10/90
October 10, 1990

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

325-U802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/7/90 *fl.*

Matrix: (soil/water) ~~WATER~~ OIL

Lab Sample ID: 9U0816-018

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06555

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) CAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	11000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	190000.	U
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	120000.	U
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	970000.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

325-U802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/1/90 *see*

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-018

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06555

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 8

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108872	CYCLOHEXANE, METHYL	12.86	120000	J
2. 111659	OCTANE	15.57	140000	J
3. 1678917	CYCLOHEXANE, ETHYL	16.78	93000	J
4.	UNKNOWN	19.85	57000	J
5.	UNKNOWN	20.22	190000	J
6.	UNK. (BENZENE ISOMER)	20.69	97000	J
7.	UNKNOWN	22.19	96000	J
8.	UNK. (BENZENE ISOMER)	22.66	550000	J
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11.				
12.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MARTIN MARIETTA

Contract: 0288

3000-0802-1

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/11/90 JPP

Matrix: (soil/water) WATER O/L

Lab Sample ID: 900816-013

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06535

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: (pack/cap) CAP

Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10000000.	IU
74-83-9	Bromomethane	10000000.	IU
75-01-4	Vinyl Chloride	10000000.	IU
75-00-3	Chloroethane	10000000.	IU
75-09-2	Methylene Chloride	5000000.	IU
67-64-1	Acetone	10000000.	IU
75-15-0	Carbon Disulfide	5000000.	IU
75-35-4	1,1-Dichloroethene	5000000.	IU
75-34-3	1,1-Dichloroethane	5000000.	IU
540-59-0	1,2-Dichloroethene (total)	5000000.	IU
67-66-3	Chloroform	5000000.	IU
107-06-2	1,2-Dichloroethane	5000000.	IU
78-93-3	2-Butanone	10000000.	IU
71-55-6	1,1,1-Trichloroethane	5000000.	IU
56-23-5	Carbon Tetrachloride	5000000.	IU
108-05-4	Vinyl Acetate	10000000.	IU
75-27-4	Bromodichloromethane	5000000.	IU
78-87-5	1,2-Dichloropropane	5000000.	IU
10061-01-5	cis-1,3-Dichloropropene	5000000.	IU
79-01-6	Trichloroethene	5000000.	IU
124-48-1	Dibromochloromethane	5000000.	IU
79-00-5	1,1,2-Trichloroethane	5000000.	IU
71-43-2	Benzene	67000000.	I
10061-02-6	trans-1,3-Dichloropropene	5000000.	IU
75-25-2	Bromoform	5000000.	IU
108-10-1	4-Methyl-2-pentanone	10000000.	IU
591-78-6	2-Hexanone	10000000.	IU
127-18-4	Tetrachloroethene	5000000.	IU
79-34-5	1,1,2,2-Tetrachloroethane	5000000.	IU
108-88-3	Toluene	67000000.	I
108-90-7	Chlorobenzene	5000000.	IU
100-41-4	Ethylbenzene	19000000.	I
100-42-5	Styrene	5000000.	IU
1330-20-7	Xylene (total)	95000000.	I

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
3000-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/17/90 JPC

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-013

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06535

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: CAP

Dilution Factor: 1000000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 589344	HEXANE, 3-METHYL	10.71	9800000	J
2. 103651	BENZENE, PROPYL	22.20	5600000	J
3. 611143	BENZENE, 1-ETHYL-2-METHYL	22.65	36000000	J
4.				
5.				
6.				
7.				
8.				
9.				
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12.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-3

Lab Name: MARTIN MARIETTA Contract: 0288

Lab Code: K25 Case No.: G132-027 SAS No.: NA SDG No.: 827
3000-0802-1

Matrix: (soil/water) WATER OIL Lab Sample ID: 900816-016

Sample wt/vol: 5 (g/mL) ML Lab File ID: >06554

Level: (low/med) LOW Date Received: 08/11/90

% Moisture: not dec. NA Date Analyzed: 8/20/90

Column: (pack/cap) CAP Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	IU
74-83-9	Bromomethane	100000.	IU
75-01-4	Vinyl Chloride	100000.	IU
75-00-3	Chloroethane	100000.	IU
75-09-2	Methylene Chloride	50000.	IU
67-64-1	Acetone	100000.	IU
75-15-0	Carbon Disulfide	50000.	IU
75-35-4	1,1-Dichloroethene	50000.	IU
75-34-3	1,1-Dichloroethane	50000.	IU
540-59-0	1,2-Dichloroethene (total)	50000.	IU
67-66-3	Chloroform	50000.	IU
107-06-2	1,2-Dichloroethane	50000.	IU
78-93-3	2-Butanone	100000.	IU
71-55-6	1,1,1-Trichloroethane	50000.	IU
56-23-5	Carbon Tetrachloride	50000.	IU
108-05-4	Vinyl Acetate	100000.	IU
75-27-4	Bromodichloromethane	50000.	IU
78-87-5	1,2-Dichloropropane	50000.	IU
10061-01-5	cis-1,2-Dichloropropene	50000.	IU
79-01-6	Trichloroethene	50000.	IU
124-48-1	Dibromochloromethane	50000.	IU
79-00-5	1,1,2-Trichloroethane	50000.	IU
71-43-2	Benzene	50000.	IU
10061-02-6	trans-1,3-Dichloropropene	50000.	IU
75-25-2	Bromoform	50000.	IU
108-10-1	4-Methyl-2-pentanone	100000.	IU
591-78-6	2-Hexanone	100000.	IU
127-18-4	Tetrachloroethene	50000.	IU
79-34-5	1,1,2,2-Tetrachloroethane	50000.	IU
108-88-3	Toluene	50000.	IU
108-90-7	Chlorobenzene	50000.	IU
100-41-4	Ethylbenzene	50000.	IU
100-42-5	Styrene	50000.	IU
1330-20-7	Xylene (total)	50000.	IU

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3000-0802-3

Lab Name: MARTIN MARIETTA

Contract: U288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 827

3000-0802-1

9/17/90 JPP

Matrix: (soil/water) WATER oil

Lab Sample ID: 900816-016

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06554

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA

Contract: 0288

3000-0802-1

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: 027

Matrix: (soil/water) WATER oil

Lab Sample ID: 900816-017

SAS
9/22/90

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06539

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: (pack/cap) CAP

Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10000000.	1U
74-83-9	Bromomethane	10000000.	1U
75-01-4	Vinyl Chloride	10000000.	1U
75-00-3	Chloroethane	10000000.	1U
75-09-2	Methylene Chloride	5000000.	1U
67-64-1	Acetone	10000000.	1U
75-15-0	Carbon Disulfide	5000000.	1U
75-35-4	1,1-Dichloroethene	5000000.	1U
75-34-3	1,1-Dichloroethane	5000000.	1U
540-59-0	1,2-Dichloroethene (total)	5000000.	1U
67-66-3	Chloroform	5000000.	1U
107-06-2	1,2-Dichloroethane	5000000.	1U
78-93-3	2-Butanone	10000000.	1U
71-55-6	1,1,1-Trichloroethane	5000000.	1U
56-23-5	Carbon Tetrachloride	5000000.	1U
108-05-4	Vinyl Acetate	10000000.	1U
75-27-4	Bromodichloromethane	5000000.	1U
78-87-5	1,2-Dichloropropane	5000000.	1U
10061-01-5	cis-1,3-Dichloropropene	5000000.	1U
79-01-6	Trichloroethene	5000000.	1U
124-48-1	Dibromochloromethane	5000000.	1U
79-00-5	1,1,2-Trichloroethane	5000000.	1U
71-43-2	Benzene	5000000.	1U
10061-02-6	trans-1,3-Dichloropropene	5000000.	1U
75-25-2	Bromoform	5000000.	1U
108-10-1	4-Methyl-2-pentanone	10000000.	1U
591-78-6	2-Hexanone	10000000.	1U
127-18-4	Tetrachloroethene	5000000.	1U
79-34-5	1,1,2,2-Tetrachloroethane	5000000.	1U
108-88-3	Toluene	8200000.	1U
108-90-7	Chlorobenzene	5000000.	1U
100-41-4	Ethylbenzene	8000000.	1U
100-42-5	Styrene	5000000.	1U
1330-20-2	Xylene (total)	50000000.	1U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3000-0802-4

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132

SAS No.: NA

SDG No.: 027

Matrix: (soil/water) WATER oil

Lab Sample ID: 900816-017

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06539

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: CAP

Dilution Factor: 1000000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (METHYLETHYLBENZENE)	22.64	24000000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6652-P-0807-11

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/17/90 DPC

Matrix: (soil/water) WATER 014

Lab Sample ID: 900816-U27

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06561

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) CAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	37000.	U
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	350000.	U
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	330000.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

6692-P-0807-11

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

8000-0802-1

Matrix: (soil/water) WATER 0/L

Lab Sample ID: 900816-027

9/7/90 Dec

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06561

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

Number PICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNK. (BENZENE ISOMER)	15.90	740000	J
2.	UNK. (BENZENE ISOMER)	18.88	220000	J
3.	UNKNOWN	21.50	910000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MARTIN MARIETTA

Contract: 0288

182N-3-U807-11

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0502-1

9/17/90 DTC

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-U19

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06556

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) CAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	55000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	650000.	U
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	550000.	U
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	2200000.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
182N-3-0807-11

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027SAS No.: NA

SDG No.: 827
3000-0802-1

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-019
9/7/90

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06556

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number PICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.50	130000	J
2.108872	ICYCLOHEXANE, METHYL	12.86	640000	J
3.	UNKNOWN	14.39	190000	J
4.1678917	ICYCLOHEXANE, ETHYL	16.79	740000	J
5.	UNKNOWN	19.89	130000	J
6.	UNKNOWN	20.24	350000	J
7.	UNK. (BENZENE ISOMER)	20.71	150000	J
8.	UNKNOWN	21.57	480000	J
9.	UNKNOWN	22.22	290000	J
10.	UNK. (BENZENE ISOMER)	22.75	220000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KW1A-U807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/7/90 JPP

Matrix: (soil/water) WATER 0/L

Lab Sample ID: 900816-U24

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06558

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) CAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	U
74-83-9	Bromomethane	100000.	U
75-01-4	Vinyl Chloride	100000.	U
75-00-3	Chloroethane	100000.	U
75-09-2	Methylene Chloride	50000.	U
67-64-1	Acetone	100000.	U
75-15-0	Carbon Disulfide	50000.	U
75-35-4	1,1-Dichloroethene	50000.	U
75-34-3	1,1-Dichloroethane	50000.	U
540-59-0	1,2-Dichloroethene (total)	50000.	U
67-66-3	Chloroform	50000.	U
107-06-2	1,2-Dichloroethane	50000.	U
78-93-3	2-Butanone	100000.	U
71-55-6	1,1,1-Trichloroethane	50000.	U
56-23-5	Carbon Tetrachloride	50000.	U
108-05-4	Vinyl Acetate	100000.	U
75-27-4	Bromodichloromethane	50000.	U
78-87-5	1,2-Dichloropropane	50000.	U
10061-01-5	cis-1,3-Dichloropropene	50000.	U
79-01-6	Trichloroethene	50000.	U
124-48-1	Dibromochloromethane	50000.	U
79-00-5	1,1,2-Trichloroethane	50000.	U
71-43-2	Benzene	50000.	U
10061-02-6	trans-1,3-Dichloropropene	50000.	U
75-25-2	Bromoform	50000.	U
108-10-1	4-Methyl-2-pentanone	100000.	U
591-78-6	2-Hexanone	100000.	U
127-18-4	Tetrachloroethene	50000.	U
79-34-5	1,1,2,2-Tetrachloroethane	50000.	U
108-88-3	Toluene	23000.	U
108-90-7	Chlorobenzene	50000.	U
100-41-4	Ethylbenzene	480000.	U
100-42-5	Styrene	50000.	U
1330-20-7	Xylene (total)	340000.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

KW1A-U807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

3000-0802-1

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 827

9/7/90 DPE

Matrix: (soil/water) WATER O/L

Lab Sample ID: 900816-U24

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06558

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number PICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	14.74	58000	J
2.	UNK. (BENZENE ISOMER)	18.87	810000	J
3.	UNKNOWN	21.52	3700000	J
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

KWIB-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

3000-0802-1

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: ~~047~~

9/7/90 Dec

Matrix: (soil/water) WATER O/L

Lab Sample ID: 900816-025

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06559

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) CAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	IU
74-83-9	Bromomethane	100000.	IU
75-01-4	Vinyl Chloride	100000.	IU
75-00-3	Chloroethane	100000.	IU
75-09-2	Methylene Chloride	50000.	IU
67-64-1	Acetone	100000.	IU
75-15-0	Carbon Disulfide	50000.	IU
75-35-4	1,1-Dichloroethene	50000.	IU
75-34-3	1,1-Dichloroethane	50000.	IU
540-59-0	1,2-Dichloroethene (total)	50000.	IU
67-66-3	Chloroform	50000.	IU
107-06-2	1,2-Dichloroethane	50000.	IU
78-93-3	2-Butanone	100000.	IU
71-55-6	1,1,1-Trichloroethane	50000.	IU
56-23-5	Carbon Tetrachloride	50000.	IU
108-05-4	Vinyl Acetate	100000.	IU
75-27-4	Bromodichloromethane	50000.	IU
78-87-5	1,2-Dichloropropane	50000.	IU
10061-01-5	cis-1,3-Dichloropropene	50000.	IU
79-01-6	Trichloroethene	50000.	IU
124-48-1	Dibromochloromethane	50000.	IU
79-00-5	1,1,2-Trichloroethane	50000.	IU
71-43-2	Benzene	50000.	IU
10061-02-6	trans-1,3-Dichloropropene	50000.	IU
75-25-2	Bromoform	50000.	IU
108-10-1	4-Methyl-2-pentanone	100000.	IU
591-78-6	2-Hexanone	100000.	IU
127-18-4	Tetrachloroethene	50000.	IU
79-34-5	1,1,2,2-Tetrachloroethane	50000.	IU
108-88-3	toluene	41000.	IJ
108-90-7	Chlorobenzene	50000.	IU
100-41-4	Ethylbenzene	140000.	IJ
100-42-5	Styrene	22000.	IJ
1330-20-7	Xylene (total)	120000.	IJ

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

KW18-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 827

3000-0802-1

9/7/90 JEP

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-025

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06559

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	18.44	49000	J
2. 111842	NONANE	18.87	190000	J
3.	UNKNOWN	20.22	320000	J
4.	UNKNOWN	21.53	520000	J
5.				
6.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L39-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802-1

9/7/90 JTC

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-026

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06560

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) LAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	IU
74-83-9	Bromomethane	100000.	IU
75-01-4	Vinyl Chloride	100000.	IU
75-00-3	Chloroethane	100000.	IU
75-09-2	Methylene Chloride	50000.	IU
67-64-1	Acetone	100000.	IU
75-15-0	Carbon Disulfide	50000.	IU
75-35-4	1,1-Dichloroethene	50000.	IU
75-34-3	1,1-Dichloroethane	50000.	IU
540-59-0	1,2-Dichloroethene (total)	50000.	IU
67-66-3	Chloroform	50000.	IU
107-06-2	1,2-Dichloroethane	50000.	IU
78-93-3	2-Butanone	100000.	IU
71-55-6	1,1,1-Trichloroethane	50000.	IU
56-23-5	Carbon Tetrachloride	50000.	IU
108-05-4	Vinyl Acetate	100000.	IU
75-27-4	Bromodichloromethane	50000.	IU
78-87-5	1,2-Dichloropropane	50000.	IU
10061-01-5	cis-1,3-Dichloropropene	50000.	IU
79-01-6	Trichloroethene	50000.	IU
124-48-1	Dibromochloromethane	50000.	IU
79-00-5	1,1,2-Trichloroethane	50000.	IU
71-43-2	Benzene	45000.	IJ
10061-02-6	trans-1,3-Dichloropropene	50000.	IU
75-25-2	Bromoform	50000.	IU
108-10-1	4-Methyl-2-pentanone	100000.	IU
591-78-6	2-Hexanone	100000.	IU
127-18-4	Tetrachloroethene	50000.	IU
79-34-5	1,1,2,2-Tetrachloroethane	50000.	IU
108-88-3	Toluene	490000.	IU
108-90-7	Chlorobenzene	50000.	IU
100-41-4	Ethylbenzene	1200000.	IU
100-42-5	Styrene	50000.	IU
1330-20-7	Xylene (total)	1200000.	IU

430000
JTC
8/20/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L39-0802-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 827

3000-0802-1

9/7/90 JPP

Matrix: (soil/water) WATER OIL

Lab Sample ID: -900816-026

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06560

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 7

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.12	64000	J
2. 110827	CYCLOHEXANE	10.48	110000	J
3. 142825	HEPTANE	11.97	54000	J
4. 108872	CYCLOHEXANE, METHYL	12.85	310000	J
5. 1678917	CYCLOHEXANE, ETHYL	16.80	340000	J
6.	UNKNOWN	20.05	55000	J
7.	UNKNOWN HYDROCARBON	21.48	330000	J
8.				
9.				
10.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N-LFT-0807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDS No.: 027

3000-0802-1

9/1/90 JTC

Matrix: (Soil/water) WATER OIL

Lab Sample ID: 900816-025

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06557

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: (pack/cap) LAP

Dilution Factor: 10000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100000.	IU
74-83-9	Bromomethane	100000.	IU
75-01-4	Vinyl Chloride	100000.	IU
75-00-3	Chloroethane	100000.	IU
75-09-2	Methylene Chloride	50000.	IU
67-64-1	Acetone	100000.	IU
75-15-0	Carbon Disulfide	50000.	IU
75-35-4	1,1-Dichloroethane	50000.	IU
75-34-3	1,1-Dichloroethane	50000.	IU
540-59-0	1,2-Dichloroethane (total)	50000.	IU
67-66-3	Chloroform	50000.	IU
107-06-2	1,2-Dichloroethane	50000.	IU
78-93-3	2-Butanone	100000.	IU
71-55-6	1,1,1-Trichloroethane	50000.	IU
56-23-5	Carbon Tetrachloride	50000.	IU
108-05-4	Vinyl Acetate	100000.	IU
75-27-4	Bromodichloromethane	50000.	IU
78-87-5	1,2-Dichloropropane	50000.	IU
10061-01-5	cis-1,3-Dichloropropene	50000.	IU
79-01-6	Trichloroethene	50000.	IU
124-48-1	Dibromochloromethane	50000.	IU
79-00-5	1,1,2-Trichloroethane	50000.	IU
71-43-2	Benzene	48000.	IJ
10061-02-6	trans-1,3-Dichloropropene	50000.	IU
75-25-2	Bromoform	50000.	IU
108-10-1	4-Methyl-2-pentanone	100000.	IU
591-78-6	2-Hexanone	100000.	IU
127-18-4	Tetrachloroethane	50000.	IU
79-34-5	1,1,2,2-Tetrachloroethane	50000.	IU
108-88-3	Toluene	360000.	I
108-90-7	Chlorobenzene	50000.	IU
100-41-4	Ethylbenzene	880000.	I
100-42-5	Styrene	50000.	IU
1330-20-7	Xylene (total)	1600000.	I

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
N-LFT-U807-1

Lab Name: MARTIN MARIETTA

Contract: 0288

Lab Code: K25

Case No.: G132-627 SAS No.: NA

SDG No.: 827

3000-0802-1

9/7/90 Dec

Matrix: (soil/water) WATER 014

Lab Sample ID: 900816-023

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06557

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/20/90

Column: CAP

Dilution Factor: 10000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.74	86000	J
2.142825	HEPTANE	11.99	27000	J
3.108872	CYCLOHEXANE, METHYL	12.89	350000	J
4.592278	HEPTANE, 2-METHYL	14.41	110000	J
5.	UNKNOWN	16.82	690000	J
6.	UNKNOWN	18.89	860000	J
7.	UNKNOWN	19.91	140000	J
8.	UNKNOWN	21.52	140000	J
9.	UNK. (BENZENE ISOMER)	22.26	720000	J
10.	UNK. (BENZENE ISOMER)	22.69	820000	J
11.				
12.				
13.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: MARTIN MARIETTA

Contract: 0288

SS27-UB06-1

Lab Code: K25

Case No.: G132-027 SAS No.: NA

SDG No.: 027

3000-0802 -1

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-022

9/7/90

DCC

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06544

Level: (low/med) LOW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: (pack/cap) CAP

Dilution Factor: 1000000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10000000.	U
74-83-9	Bromomethane	10000000.	U
75-01-4	Vinyl Chloride	10000000.	U
75-00-3	Chloroethane	10000000.	U
75-09-2	Methylene Chloride	5000000.	U
67-64-1	Acetone	10000000.	U
75-15-0	Carbon Disulfide	5000000.	U
75-35-4	1,1-Dichloroethene	5000000.	U
75-34-3	1,1-Dichloroethane	5000000.	U
540-59-0	1,2-Dichloroethene (total)	5000000.	U
67-66-3	Chloroform	5000000.	U
107-06-2	1,2-Dichloroethane	5000000.	U
78-93-3	2-Butanone	10000000.	U
71-55-6	1,1,1-Trichloroethane	5000000.	U
56-23-5	Carbon Tetrachloride	5000000.	U
108-05-4	Vinyl Acetate	10000000.	U
75-27-4	Bromodichloromethane	5000000.	U
78-87-5	1,2-Dichloropropane	5000000.	U
10061-01-5	cis-1,3-Dichloropropene	5000000.	U
79-01-6	Trichloroethene	5000000.	U
124-48-1	Dibromochloromethane	5000000.	U
79-00-5	1,1,2-Trichloroethane	5000000.	U
71-43-2	Benzene	12000000.	U
10061-02-6	trans-1,3-Dichloropropene	5000000.	U
75-25-2	Bromoform	5000000.	U
108-10-1	4-Methyl-2-pentanone	10000000.	U
591-78-6	2-Hexanone	10000000.	U
127-18-4	Tetrachloroethene	5000000.	U
79-34-5	1,1,2,2-Tetrachloroethane	5000000.	U
108-88-3	Toluene	53000000.	U
108-90-7	Chlorobenzene	5000000.	U
100-41-4	Ethylbenzene	11000000.	U
100-42-5	Styrene	5000000.	U
1330-20-7	Xylene (total)	58000000.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS27-0806-1

Lab Name: MARTIN MARIETTA

Contract: 0288

7000-0802-1

Lab Code: K25

Case No.: G132-027

SAS No.: NA

SDG No.: 827

9/7/90

Matrix: (soil/water) WATER OIL

Lab Sample ID: 900816-022

Sample wt/vol: 5 (g/mL) ML

Lab File ID: >06544

Level: (low/med) LDW

Date Received: 08/11/90

% Moisture: not dec. NA

Date Analyzed: 8/19/90

Column: CAP

Dilution Factor: 1000000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.54	20000000	J
2.109660	PENTANE	4.12	11000000	J
3.107835	PENTANE,2-METHYL	6.58	31000000	J
4.	UNKNOWN	9.10	28000000	J
5.565593	PENTANE,2,3-DIMETHYL	10.72	43000000	J
6.	UNKNOWN	11.44	37000000	J
7.589435	HEXANE,2,4-DIMETHYL	13.14	12000000	J
8.	UNKNOWN	13.78	18000000	J
9.62016379	OCTANE,2,4,6-TRIMETHYL	21.53	13000000	J
10.	UNK.(BENZENE ISOMER)	22.60	15000000	J
11.				
12.				
13.				
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Company Contact Jean Kerens Telephone 3-3507

Sample Collected by R.Z. Steffler Date 8-3-90 Time 1028

Sample Locations 200 W Area, TX Tank Farms, Cross Site Transfer Line

Ice Chest No. # Field Logbook and Page No. WAC-N-205-9C pgs 8

Remarks _____

Bill of Lading No. NA Offsite Property No. NA

Method of Shipment Hand Carried

Shipped to _____

Possible Sample Hazards Radionuclides

Sample Identification	Analysis
CSTL-0803-10 + 11 250mlg	TCLP
↓ 250mlg	Spec. Vol, Hexch, PAH, In. Sulfide, Arsenic
↓ 40mlg R25	Selenium, Mercury, Lead & Ammonia
↓ 40mlg	VOA
↓ 40mlg	VOA-d
CSTL-0803-10B + 11B 40mlg	VOA-B
CSTL-0803-12 + 13 250mlg	TCLP
↓ 250mlg	Spec. Vol, Hexch, PAH, In. Sulfide, Arsenic
↓ 40mlg	Selenium, Mercury, Lead & Ammonia
↓ 40mlg	VOA
↓ 40mlg	VOA-d
CSTL-0803-12B + 13B 40mlg	VOA-B

Chain of Possession

Relinquished by: <u>R.Z. Steffler</u>	Received by: <u>S. DEMAREST</u>	Date/Time: <u>8-4-90 14:18</u>
Relinquished by: <u>S. DEMAREST</u>	Received by: <u>MARSHALL</u>	Date/Time: <u>8-11-90 1100</u>
Relinquished by: _____	Received by: <u>CO</u>	Date/Time: _____
Relinquished by: _____	Received by: _____	Date/Time: _____

Westinghouse Hanford
Company

CHAIN OF CUSTODY 1147

Company Contact: Juan Kessner / Ron Shuck Telephone 3-3507 / 3-5525

Sample Collected by: R. Z. Steffler Date 8-2-90 Time 1044

Sample Locations: 3000 Area Tanks 12314 + 325 Bldg Tank

Ice Chest No.: # 86 Field Logbook and Page No. WMC-N 205-5 p. 20, 25

Remarks _____

Bill of Lading No. NA Offsite Property No. NA

Method of Shipment _____

Shipped to _____

Possible Sample Hazards Flammable

Sample Identification

3000 - 0802 - 1	Integrated Hydrocarbon Sample	
" " "	VOA Sample	NA
3000 - 0802 - 3	" "	" "
" " "	" "	" "
3000 - 0802 - 4	" "	" "
" " "	" "	" "
325 - 1802 - 1	" "	" "
" " "	" "	" "

Chain of Possession

Relinquished by: <u>R. Z. Steffler</u> <u>R. Z. Steffler</u>	Received by: <u>J. DEMAREST</u> <u>J. Demarest</u>	Date/Time: <u>8-9-90</u> <u>14:18</u>
Relinquished by: <u>J. DEMAREST</u> <u>J. Demarest</u>	Received by: <u>M. J. (unclear)</u>	Date/Time: <u>8-11-90</u> <u>11:00</u>
Relinquished by: _____	Received by: _____	Date/Time: _____
Relinquished by: _____	Received by: _____	Date/Time: _____

Westinhouse Hanford
Company

CHAIN OF CUSTODY 1152

Company Contact Jean Kessner / Ken Lane Telephone 3-3507

Collected by R.Z. Steffler Date 8/8/90 Time 0800

Sample Locations Field East of 200E Area

Ice Chest No. N/A Field Logbook and Page No. _____

Remarks _____

Bill of Lading No. _____ Offsite Property No. _____

Method of Shipment _____

Shipped to _____

Sample Identification

TP-4-3.5-4.0	60ml AG	Total Activity
TP-4-6.0-6.5	60ml AG	Total Activity
TP-4-11.0-11.5	60ml AG	Total Activity
TP-2-2.0-2.5	60ml AG	Total Activity
TP-2-3.5-4.0	60ml AG	Total Activity
TP-3-7.5-8.5	60ml AG	Total Activity
TP-1-3.5-4.0	60ml AG	Total Activity
TP-1-5.0-5.5	60ml AG	Total Activity
3-3.5-4.0	60ml AG	Total Activity

Chain of Possession

Relinquished by: <u>R.Z. Steffler</u> <u>R.Z. Steffler</u>	Received by: <u>Judy K. Watts</u>	Date/Time: <u>8/9/90 @ 11:50</u>
Relinquished by: <u>Judy K. Watts</u>	Received by: <u>RE</u>	Date/Time: <u>8/09/90 @ 1345</u>
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time: